





UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. BOX 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

20995

7590

06/17/2003

KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614 EXAMINER

ROCCHEGIANI, RENZO

ART UNIT

CLASS-SUBÇLASS

2825

438-239000

DATE MAILED: 06/17/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/452,844	12/03/1999	IVO RAAIJMAKERS	ASMEX.256A	1825

TITLE OF INVENTION: CONFORMAL THIN FILMS OVER TEXTURED CAPACITOR ELECTRODES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$0	\$1300	09/17/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Complete and send this form, together with applicable fee(s), to: <u>Mail</u> Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

(703)746-4000 <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block I)

06/17/2003

KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR **IRVINE, CA 92614**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

	ransimiled to the CS1 10, on the date indicated below:
(Depositor's name)	
(Signature)	
(Date)	

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09/452 844	12/03/1999	IVO RAAIIMAKERS	ASMEX 256A	1825

TITLE OF INVENTION: CONFORMAL THIN FILMS OVER TEXTURED CAPACITOR ELECTRODES

				· Andrews	
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nonprovisional	NO	\$1300	\$0	\$1300	09/17/2003
ЕХАМП	NER	ART UNIT	CLASS-SUBCLASS		
ROCCHEGIA	NI, RENZO	2825	438-239008		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).			2. For printing on the patent fi the names of up to 3 registered	d patent attorneys	
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.			or agents OR, alternatively, (2 single firm (having as a mer	nber a registered	
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			attorney or agent) and the na registered patent attorneys or a is listed, no name will be printed	gents. If no name	

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will	not be printed on the patent)	individual	a corporation or other private group entity	government	
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s):				
□ Issue Fee	☐ A check in the amount of the fee(s) is enclosed.				
D Publication Fee	□ Payment by credit card. Form PTO-2038 is attached.				
☐ Advance Order - # of Copies	☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).				
Commissioner for Patents is requested to apply the Issue Fac and	Dublication Eq. (if any) or to re-		under meid innen for the about the size of the size		

mmissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents. Alexandria, Virginia 22313-1450. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

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20995	7590 06/17/2003		EXAMIN	ER
KNOBBE M.	KNOBBE MARTENS OLSON & BEAR LLP		ROCCHEGIANI, RENZO	
2040 MAIN S' FOURTEENT			ART UNIT	PAPER NUMBER
IRVINE, CA 92614 UNITED STATES			2825	
UNITED STA	163		DATE MAILED: 06/17/2003	

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



UNITED STATES PATENT AND TRADEMARK OFFICE

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2040 MAIN ST FOURTEENTH			ART UNIT	PAPER NUMBER
IRVINE, CA 92614 UNITED STATES		2825		
			DATE MAILED: 06/17/2003	

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

AA

	Application No.	Applicant(s)
2.	09/452,844	RAAIJMAKERS ET AL.
Notice of Allowability	Examiner	Art Unit
	Renzo N. Rocchegiani	2825
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to the appeal brief filed on 2. The allowed claim(s) is/are 1.3-30,33-35 and 55-63. 3. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	pars on the cover sheet with the co (OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to and MPEP 1308. on March 26, 2003. the Examiner. der 35 U.S.C. § 119(a)-(d) or (f).	orrespondence address blication. If not included will be mailed in due course. THIS b withdrawal from issue at the initiative
 Acknowledgment is made of a claim for domestic priority ur (a) The translation of the foreign language provisional a Acknowledgment is made of a claim for domestic priority ur Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the content of the	pplication has been received. nder 35 U.S.C. §§ 120 and/or 121. this communication to file a reply co	emplying with the requirements noted
7. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which gives reas		
 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No. (b) including changes required by the proposed drawing of including changes required by the attached Examiner' Identifying indicia such as the application number (see 37 CFR 1. each sheet. 	correction filed, which has be s Amendment / Comment or in the C	een approved by the Examiner. Office action of Paper No
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR TI 		
Attachment(s)		
 1 Notice of References Cited (PTO-892) 3 Notice of Draftperson's Patent Drawing Review (PTO-948) 5 Information Disclosure Statements (PTO-1449), Paper No 7 Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4□ Interview Summa 6⊠ Examiner's Amer	ment of Reasons for Allowance RABIAN FENT EXAMINER

Notice of Allowability

U.S. Patent and Trademark Office

PTO-37 (Rev. 04-03)

Part of Paper No. 27 .

Application/Control Number: 09/452,844

Art Unit: 2825

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Adeel Akhtar on June 10, 2003.

The application has been amended as follows: In claim 63, line 8, delete "the layer forming part of the capacitor." and replace with wherein no more than one monolayer is formed per cycle."

2. The following is an examiner's statement of reasons for allowance: the prior art does not teach or suggest forming an HSG layered bottom electrode coated with a high k dielectric, wherein the high k dielectric is deposited at no more than one monolayer at the time.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renzo Rocchegiani whose telephone number is (703) 308-5839. The examiner can normally be reached on Monday through Friday from 8:30 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith, can be reached at (703) 308-1323. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

RNR

June 11, 2003

AMIR ZARABIAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800